

AMENDMENTS TO THE SPECIFICATION

Page 1:

Please substitute the following paragraph for the paragraph beginning at line 3:

The present invention relates to an electronic circuitry circuit equipment using a multilayer circuit board that includes a buried built-in capacitor.

Please substitute the following paragraph for the paragraph beginning at line 7:

In accompaniment with the downsizing of a portable equipment, a technology for forming a passive component such as a capacitor within into the board in order to enhance the mounting density has become more been becoming prevalent, especially in with the case of a cellular phones phone as its central trend. The technology that is in the mainstream at present employs is a one where a ceramic board is employed. Attention, however, is now focused on a resin-based board with passive elements built in, because such a element built-in board for the reasons that this board is light-weight light-weighted, not subject to cracking cracked, inexpensive, etc.. or the like. When forming In the case of building a capacitor within inside a board, employing a thin film capacitor whose capacitive density can be made higher is advantageous in downsizing

the board. United States State Patent 5,027,253 has disclosed a conventional technology concerning a board in which the thin film capacitor is buried. This technology will be explained below, using FIG. 4. The board includes a first signal core 121 including a first thin film copper wiring 123 that has a first thin film copper electrode 125, a second signal core 131 including a second thin film copper wiring 123 that has a second thin film copper electrode 135 which overlays the first thin film copper electrode, and an epitaxial thin film 151 of a dielectric material positioned between the first thin film copper electrode and the second thin film copper electrode. Here, the first thin film copper electrode, the second thin film copper electrode, and the epitaxial thin film of the dielectric material form the integrally-buried type thin film capacitor 141 inside the multilayer circuit package 101. The first signal core and the second signal core are formed of a metal having a high electrical-conductivity, e.g., copper, silver, and aluminum. The epitaxial thin film of the dielectric material between the first thin film copper electrode and the second thin film copper electrode is formed of a sputtered film of ceramics, the representatives of which are, e.g., calcium titanate, barium titanate, aluminum oxide, beryllium oxide, and aluminum nitride. The formation of the structure like this makes it possible to implement, inside the package, the capacitor including the electrodes and the dielectric. Here, the

electrodes have the electrical-conductivity higher than those of metals, e.g., Y, Ti, Zr, Ta, Hf, Nb, Mo, and W, and the dielectric has a dielectric-constant higher than those of oxides of, e.g., Y, Ti, Zr, Ta, Hf, Nb, Mo, and W. This implementation allows a capacitor element to be removed from the package surface, thereby enlarging a package surface available for a logic circuit chip/module and thus enhancing the package density.

Page 3:

Please substitute the following paragraph for the paragraph beginning at line 6:

In the conventional multilayer circuit package that United States State Patent 5,027,253 has proposed, there existed a problem that it is difficult to cause a ceramic, i.e., the dielectric material, to grow epitaxially on the first signal core. This is because the lattice constant of the metal such as copper, silver, and aluminum does not coincide with the lattice constant of the ceramic planned to grow on the metal. As a result, the sputtered thin film of the ceramic became more likely to exhibit an amorphous growth instead of the crystallization growth. The resultant amorphous thin film of the ceramic exhibits a lower dielectric-constant as compared with an the epitaxial thin film that has grown by the crystallization growth. Accordingly, the capacity value of a capacitor fabricated

using this amorphous thin film becomes smaller than that of the capacitor fabricated using the epitaxial thin film.

Page 4:

Please substitute the following paragraph for the paragraph beginning at line 21:

Although there exist capacitors of a variety of uses, e.g., an impedance-matching a for-impedance-matching capacitor and a bypass capacitor, as capacitors used in an electronic circuit, the performances required requested for the respective uses differ from each other. In order to downsize further the electronic circuit using the multilayer circuit board, it is required to build as many capacitors as possible inside the multilayer circuit board independently of the uses. However, if precision accuracy-requested capacitors, e.g., impedance-matching the for-impedance-matching capacitors, are built inside the multilayer circuit board, manufacturing variations a manufacture variation in the capacity values become becomes a serious problem. In the conventional multilayer circuit package, no consideration has been given to precision the accuracy-requested capacitors.